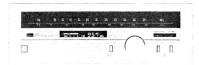
# SERVICE MANUAL

FM/AM STEREO TUNER

**SANSUI T-80/60** 





SANSUI ELECTRIC CO., LTD.

#### SPECIFICATIONS

#### <T-80/T-60>

FM Section

Tuning range . . . . . 88 to 108 MHz

Usable Sensitivity

Mono IHF . . . . . . 10.8 dBf (1.9 µV: T100)

DIN . . . . . 1.0 μV Stereo IHF . . . . 21.0 dBf

50 dB Quieting Sensitivity Mono . . . . . . . . 15.0 dBf

Stereo . . . . . . 37.0 dBf Signal to noise ratio at 65 dBf

Mono . . . . . . . 72 dB Stereo . . . . . . . 68 dB

Distortion at 65 dBf

Mono . . . . . less than 0.2 % at 1,000 Hz

Stereo . . . . less than 0.25 % at 1,000 Hz

Alternate channel selectivity (at 400 kHz)

+1.0 dB, -2.0 dB

75 ohms unbalanced

AM Section

Tuning range . . . . . 530 to 1,600 kHz Usable sensitivity (Bar antenna)

image response ratio . . 45 at 1,000 Hz

Others

Ottners
Output voltage and impedance

Power requirements . . 110 ~ 120, 220 ~ 240 V 50/60 Hz

For U.S.A. and Canada . . . . . . . . . . . . . . . . . 120 V (60 Hz)

Power consumption . . 13 W (T-60) 19 W (T-80)

Weight . . . . . . . . 4.1 kg (9.0 lbs) net

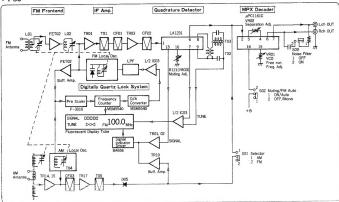
5.1 kg (11.2 lbs) packed (T-60) 4.8 kg (10.6 lbs) net 5.8 kg (12.8 lbs) packed (T-80)

5,8 kg (12.8 l05) packed 1 Dimensions . . . . 430 mm (16-15/16") W 147 mm (5-13/16") H 251 mm (9-15/16") D

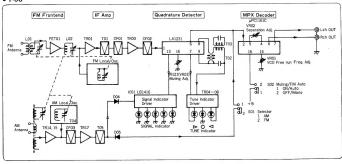
- Design and specifications subject to change withou notice for improvements.
- \* In order to simplify the explanation illustrations may sometimes differ from the originals.

# 1. BLOCK DIAGRAM

#### • T-80



#### • T-60

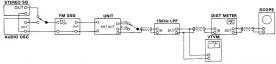


# 2. ADJUSTMENT

- 2-1. FM Adjustment (See Top View on Page 8)
- (1) FM IF, RF Adjustment and Dial Calibration

  Before making adjustments of steps 2 ~ 5, run the unit for more than 2 minutes and make the dial pointer go round on the dial scale at once by tuning knob.





SUBJECT  IF Coil Adj. In case of using	FROM	то	OUTPUT	ADJUST	ADJUST FOR	REMARKS	
IF Coil Adj.							
Genescope	Output 80 dB Genescope	JW03 F-3130	Point A F-3130	T01 F-3130	Max. IF waveform	$\cap$	
IF Coil Adj. In case of using FM SSG & DC volt meter	98 MHz ANT Input 20 dBf (14.8 dB), 1 kHz (100% MOD) FM SSG	ANT terminal 300Ω	Voltage between Point A and chassis DC volt meter	Same as above	Max. Indication of DC volt meter Meter Range 3V	Chassis	
Discriminator Coll Adj. In case of using Genescope	Output 80 dB Genescope	Same as above	JW63 F-3130	T02, T03 F-3130	Steep linearity of S curve Make symmetrical S curve	1/1	
	No Input		Voltage between TP02 & TP03 F-3130	T02 F-3130	DC 0 V ±0.1 V		
Discriminator Coil Adj. In case of using Dist meter	98 MHz ANT Input 65 dBf (59.8 dB), 1 kHz (100% MOD.) FM SSG	ANT terminal 300Ω	OUTPUT L-CH or R-CH Dist Meter VTVM & Scope	T02, T03 & T01 F-3130	Min. THD		
	No Input		Voltage between TP02 & TP03 F-3130	T02 F-3130	DC 0 V ± 0.1 V		
AFC Voltage Adj. <t-80 only=""></t-80>	No Input		Voltage between TM20 & TM25 F-3130	VR03 F-3000	DC 7 V	Note: As for T-80, steps 3, 4 & 5 should be performed after	
106 MHz	No Input		Dial Pointer	Tuning knob	106 MHz	grounding the collec- tor of TR15 on	
Calibration <t-80></t-80>			Indication of Display unit	TC03 F-3130	106 MHz	F-3000	
106 MHz	106 MHz	ANT	Dial Pointer	Tuning knob	106 MHz		
Calibration <t-60></t-60>	(-5.2 dB), 1 kHz (100% MOD) FM SSG	300Ω	OUTPUT L-CH or R-CH VTVM & Scope	TC03 F-3130	Max. Output		
90 MHz	No Input		Dial Pointer	Tuning knob	90 MHz		
Calibration <t-80></t-80>			Indication of Display unit	L04 F-3130	90 MHz		
90 MHz	90 MHz	ANT	Dial Pointer	Tuning knob	90 MHz		
Dial Calibration <t-60></t-60>	(-5.2 dB), 1 kHz (100% MOD.) FM SSG	terminal 300Ω	OUTPUT L-CH or R-CH VTVM & Scope	L04 F-3130	Max. Output		
106 MHz RF Adj.	106 MHz ANT Input Minimum value with sine wave 1 kHz (100% MOD.) FM SSG	ANT terminal 300Ω	OUTPUT L-CH or R-CH VTVM & Scope	TC01, TC02 F-3130	Max. Output	<del></del>	
	In case of using FM SSC & DC volt meter PM SSC & DC volt meter Discriminator Coil Adj. In case of using Genescope Discriminator Coil Adj. In case of using Genescope Discriminator Coil Adj. In case of using C	Incase of using   FMSSG & DC volt meter   FMSSG & DC	In case of using   FM SSG & DC volt meter   FM SSG   FM S	In case of using EM SCA 200	In case of using FM SSG & DC volt meter		

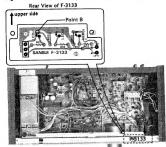
	CUDIFOR.	FEED SIGNA	L	MEASURE	ADJUST	ADJUST FOR	REMARKS
STEP	SUBJECT	FROM	TO	OUTPUT	Abjost	ADJOSTTON	
7.	90 MHz RF Adj.	90 MHz ANT Input Minimum value with sine wave 1 kHz (100% MOD.) FM SSG	Same as above	Same as above	L01, L02 F-3130	Max. Output	$\mathcal{N}$
8.	Signal Indicator Adj. <t-80 only=""></t-80>	98 MHz ANT Input 20 dBf (14.8 dB), 1 kHz (100% MOD) FM SSG	ANT terminal 300Ω	SIGNAL Indicator	VR01 F-3000	Make 3 indication segments lighting	SIGNALDDD
		98 MHz ANT Input 65 dBf (59.8 dB), 1 kHz (100% MOD) FM SSG	Same as above	Same as above	Confirm every 8 i	ndication segment	SIGNALODDOODD
		No Input		Same as above	Confirm only one lighting	indication segment	SIGNALD

#### (2) FM STEREO Adjustment

Note: FM MODE/MUTING Switch . . . . . AUTO/ON

		FEED SIGNAL		MEASURE ADJU		ADJUST FOR	REMARKS
STEP	SUBJECT	FROM	то	OUTPUT	Abjosi	ADJUSTION	
1.	PLL VCO Adj.	98 MHz ANT Input 65 dBf (59.8 dB) FM SSG Pilot 19 kHz (9% MOD) R (or L) Mode 1 kHz + Pilot (100% MOD) STEREO SG	ANT terminal 300Ω	Stereo indicator	VR01 F-3130	Light indicator	Adjust the VR within center of lighting level
	PLL VCO Adj. In case of using Freq. Counter	98 MHz ANT Input 65 dBf (59.8 dB) FM SSG (No MOD)	Same as above	JW90 <t-60> F-3130 Point B <t-80> F-3133 (See Fig. 2-1)</t-80></t-60>	VR01 F-3130	19 kHz ±50 Hz	
2.	Separation Adj.	98 MHz ANT Input 65 dBf (59.8 dB) FM SSG Pilot 19 kHz (9% MOD.) R Mode 1 kHz + Pilot (100% MOD.) STEREO SG	Same as above	OUT L-CH VTVM & Scope	VR02 F-3130	OUT -40 dB	Confirm separation L-CH → R-CH (-40 dB)
3.	Muting level Adj.	98 MHz ANT Input 15 dBf (9.8 dB) FM SSG Pilot 19 kHz (9% MOD.) SUB 1 kHz + Pilot (100% MOD.) STEREO SG	Same as above	Stereo indicator or OUTPUT L-CH or R-CH VTVM & Scope	R121 (VR03) F-3130	Stereo indicator turns ON or Output Signal comes out	

Fig. 2-1. Location of Point B (Measure output of VCO Signal)



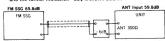
#### NEW MEASUREMENT FOR FM.

Input signal level under the provision of IHFM-T-200, a new measurement method is indicated by available power ratio "dBI" To obtain approximate available power ratio "dBI" asstrat 0.8 from attenuater indication of general FMSG (open load indication type); however, the former measurement, IHFM-T-100 is designated together too.

The way of modulation of IHFM-T-200 is shown below.

	modulation frequency	modulation mode	modulation factor
FM MONO	1000 Hz		100%
FM STEREO	1000 Hz	SUB	Pilot 9% Pilot + SUB 100%

 The relation between the standard input 65 dBf of IHFM-T-200 and the former indication "dB" is shown below.



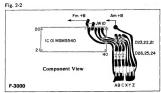
#### Selection of Intermediate Frequencies (FM) (Refer to parts location F-3000 on page 6) . . . . . < T-80 Only>

The digital locking point differs with the frequency rank of the ceramic filter used in the F-3130. When the central frequency (shown by a color) of the ceramic filter is changed, the following connection must be made by

- tion must be made by using jumper wires:

   Unify the color marks of the FM ceramic filters (CF01, CF02) on the F-3130 with the same color.
- Select the joints A, B, and C of F-3000 according to color marks as shown in the following table:

Colour	Intermediate	Con	necting per wir	Positi e on F	on of -3000	Connecting Position of Diode on F-3000			
ing	frequency	A	В	С	Jumper wire Total Q'ty	D26	D25	D24	Diode Total Q'ty
Black	10.64MHz			•	1			•	1
Brown	10.66MHz		•		1		•		1
Blue	10.68MHz		•	•	2		•	•	2
Red	10.70MHz	•			1	•			1
Orange	10.72MHz	•		•	2	•		•	2
Gray	10.74MHz	•	•		2	•	•		2
White	10.76MHz	•	•	•	3	•	•	•	3



Abbreviations     (Equipment)		_			_					_		
AM FM Generator Oscilloscop	e											Genescope
AM Standard Signal Generator	٠.							i				AM SSG
FM Standard Signal Generator				i	ì		ï	į.				FM SSG
FM Stereo Generator			ı,									Stereo SG
Oscilloscope								i		·		Scope
Audio Oscillator			į.	į	ì	ì	ì					Audio Osc
Distortion Meter												Dist. Mete
(Others)												
Antenna												ANT.
Modulation				ı					·		ı.	MOD.
Total Harmonic Distortion												

#### 2-2. AM IF Adjustment & Dial Calibration (See Top View on Page 8)





STEP	SUBIECT	FEED SIGNAL		MEASURE	ADIUST	ADJUST FOR	REMARKS
o i cr	308/201	FROM	ТО	OUTPUT	ADJUST	ADJUST FUR	KEMAKKS
1.	IF Coll Adj.	Genescope Output 60 dB	TC04 F-3130	TP06 F-3130	CF03, T05 F-3130	Max. Waveform	$\bigcap$
2.	600 kHz Dial Calibration	No Input		Dial Pointer	Tuning knob	600 kHz	
	<t-80></t-80>			Indication of digital display unit	T04 F-3130	600 kHz	535
	600 kHz	600 kHz ANT Input 60 dB	ANT	Dial Pointer	Tuning knob	600 kHz	$\wedge$
	Oial Calibration	400 Hz (30% MOD.) AM SSG		OUTPUT L-CH or R-CH VTVM & Scope	T04 F-3130	Max. Output	1
3.	1400 kHz		1	Dial Pointer	Tunign knob	1400 kHz	
	Oial Calibration <t-80></t-80>			Indication of digital display unit	TC05 F-3130	1400 kHz	1200 Hps 1600
	1400 kHz Dial Calibration	1400 kHz	ANT	Dial Pointer	Tuning knob	1400 kHz	1 0 0
	<t-60></t-60>	ANT Input 60 dB 400 Hz (30%MOD.) AM SSG	terminal	OUTPUT L-CH or R-CH VTVM & Scope	TC05 F-3130	Max. Output	1
4.	1400 kHz RF Adj.	1400 kHz ANT Input 50 dB 400 Hz (30% MOD.) AM SSG	Same as above	Same as above	TC04	Max. Output	

# 3. PARTS LOCATION & PARTS LIST

As the stock number in the parts list on this service manual is indicated in 8 digit to differ

Note: Parts marked X, Y or without marks indicate as follow:

Parts marked X in parts list . . . . . for T-80 Only
 Parts marked Y in parts list . . . . . for T-60 Only

Parts marked 7 in parts list . . . . for both T-80 and T-60.

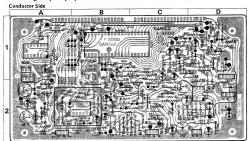
3-1. F-3130 AM, FM, RF, IF Circuit Board (Stock No. 07062101 = T-80) (Stock No. 07056701 = T-60)

Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the Common Parts List for capacitors & resistors which was appended previously to each Sansui Manual.

#### Parts List

Parts No.	Stock No.	Description	Position
◆Transistor			
TRO1	03063401, 2 03069500, 1 03068301, 2	2SC1674 L, K 2SC668 C, D	4A 4A.3A
TR02, 03 TR04	03069500, 1	2SC2320 E, F Y	28
TR05, 06	03012700, 1 03068301, 2 03067900, 1 03004700, 1	2SC2320 E,F Y 2SA999 E,F Y 2SC2320 E,F Y 2SC2320 E,F Y 2SC2320 E,F X 2SC2320 C,D X 2SC2320 C,D X 2SC2320 C,D X 2SC2320 E,F X 2SC2320 E,F X	2B
TR07.08	03068301.2	2SC2320 E.F Y	2C
TR14	03057900, 1	25C930 C, D	58
TR14 TR15	03004700, 1	2SA726 F, G	5B
	03057900, 1	2SC930 C, D X	4B
TR 17	03057900, 1	2SC930 C, D	5C
TR19 TR20	03012700, 1	2SA999 E, F X 2SB527 D, E X	4B
TR21	03034401, 2	25C2320 F.FX	2A
TR22	03057900, 1 03057900, 1 03057900, 1 03012700, 1 03034401, 2 03068301, 2 03083901, 2	2SB527 D.E X 2SC2320 E.F X 2SD313AL D.E	2A
•IC			
IC 01 IC 02	03612300	LA1231N	3A.
IC 02	03509900	uPC1161C	38
IC 03	03609200	FS7805M X	1,2B
•FET			
EET01	03703700, 1	2SK120-1, 2 X	5A
FET02	03703700, 1	2SK120-1, 2	4B
Diode			
D 01	03402100	19553T X 192473D	4B
D 02.03	03117600	1S2473D	3,4B 4C
D 06	03117600 03117800 03117700	1N80	4C
D 06~09	03117700	10E-2	1A
•Zener Dior	se .		
ZD01	03179100	RD13E-C X RD13E-C	2A 2A
ZD02	03179100		ZA.
C 39	08701500	390pF 50V P.C. 0.047pF 50V P.C. (M) 470pF 50V P.C. 1.5pF 35V Ts.C. 3.3pF 35V Ts.C. 750pF 50V P.C. 750pF 50V P.C.	3B
C 40	08504300	0.047eF 50V F.C. (M)	38
C 41	08701700	470pF 50V P.C.	38
C 42	08470800 08471000	1.5gF 35V Ts.C.	38
C 43	08471000	3.3µF 36V Ta.C.	38
C 44	98702200	750pF 50V P.C.	38
C 45	08702200	750pF 50V P.C.	38
C 46	08500400	0.0011µF 50V F.C. (M)	38
C 47	08500400	0.0011pF 50V F.C. (M)	38
C 48	08470300	0.22µF 35V Te.C.	38
C 53	08503100	OUTSET SOV F.C. IMI	3C 3C
C 55	08600900	0.0018aF 50V	3C
C 65	08502700	0.01 vE FOV F.C. (M)	58
C 73	08502700	0.01aF 50V F.C. (M)	4C
C 74	08500300	0.001µF 50V F.C. (M)	4C
C 75	08504300 08504300	0.047µF 50V F.C. (M)	4C
C 76	08504300	0.047µF 50V F.C. (M)	4C
C 88	00386100	DESPT BOV P.C.   DAY   DAY	1A
			1B
R 103	00052100	100Ω 3W Ce.H.	
R 107	00127800	270 IW F.R. Y	1A
R 108	00129700	3300 2W N I B X	2A
R 109	00189000 00189000	1000 3W Ce.R. 150 1W F.R X 270 1W F.R Y 3300 2W N.I.R X 3300 2W N.I.R X	2A
L 01	42007200		5A
L 02		Antenna Coll RF Coll	5A
L 03	49002800	Inductor 1 OwH	5A
L 04	42204000	OSC Coll	4A
L 06	42904600	Pasking Coll	3,4A
1 06	49002800	Inductor 1.0µH	5B
L 08	49004000 49002200	Inductor 1.0µH Inductor 100µH Inductor 100 mH	28
T 01	42359300	1F Coll 10.7 MHz	4A 3A
T 02	42362700	FM Detector Coll FM Detector Coll	3A 3B
T 03 T 04	42362800 42207400	AM OSC Coll	58
T 05	42306600	AM IF Coll	4C
CF 01	09104800	Ceramic Filter 10.7 MHz Ceramic Filter 10.7 MHz Ceramic Filter 455 kHz	3A
CF 02	09104800	Commin Eller ASS	5C
	Ja108900		36
CF 03	09106100	Ceramic Filter 455 kHz	5C
		Ү	
VR01	10370600	VCO Free Run Freq. Ad).	
14000		5kΩ (B) Separation Adj. 200kΩ (B)	20
VR02	10371100		
R121(VR0	3) 10371100	Muting level Adj. 200kΩ	3A
S 01	11321500	Push Switch, AM/FM	5C
		Push Switch, AM/FM Selector, FM mode	
\$ 03	11314901	Push Switch Noise Canceller X	3C
F 01	04312200	AC Fuse	
VCDI	12203000	Variable Capacitor	
VC01			
	22007000	2P Output Terminal	
	22902600	49 Antenna Terminal	

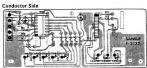
#### 3-2. F-3000 Digitally Display Circuit Board (Stock No. 75988901 = T-80)



Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.
•Transistor				•FET				C 54
TR01		3 2SC945 Q, P, K	2A	FET01		28K117 O, Y, GR, BL	1D	
TRO2		2 2SA733A P.Q.R	2A	1.101	03704000 ~ 7	2SK163 K1, K2, L1, L2,	10	L 01
TR05,08		3 2SC945 Q, P, R	2D.2C			M1, M2, N1, N2		L 02
TR07	03005100 ~	2 2SA733A P, Q, R	28	<ul> <li>Diode</li> </ul>				
TR 08, 09	03059501 ~	3 2SC945 Q, P, R	2B.2C	D 03.04	03111600	1S2473D	2A. C	VR01
TR10	03005100 ~	2 2SA733A P.O.K	28	D 07 ~ 14	03111600	152473D	1.2C	VR03
TR12~18	03059501 ~	3.2SC945 Q.P.K	1.2C	D 17, 18	03111600	1S2473D	2D.1D	
TR 20	03005100 ~	2 2SA73SA P.Q.K	10	D 21.24	03111600	1S2423D	18	XO01
TR 21	03069601 ~	3.290945 O.P.K	28	D 90, 99	09111600	1624730	10.20	
								FL01
•IC				C 11	00396900	8pF 50V C.T.	18	
IC 01	03609100	MSM5540RS	16	C 12	00387200	22pF 50V C.T.	18	
IC 03	03607700	NJM4558D	2D	C 52	00304700	33wF 16V B.P.	2C.D	
1C 04	03806300	BA658	1A	C 53	00304900	3.3gF 16V B.P.	28	

	2A. C	VR01	10351300	FM SIGNAL Adl. 10kΩ (B	2A
	1,2C	VR03	10351100	AFC Biss Adj. 4.7kB (8)	2C
	2D.1D 18	X061	39300400	Crystal 6.5536 MHz	3B
	10.22	FL01	00000100	Fluorescent Display Tube	
C.T.	18				
C.T.	18				
B.P.	2C, D				
8.2.	28				

# 3-3. F-3132 SIGNAL, TUNE Indicator Circuit Board (Stock No. 75989301 = T-60)



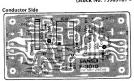
Parts No.	Stock No.	Description	
•IC			
IC 01	03611600	LB1416	
LED01 ~ 05	03193200	GL-9PR9 (Red)	
LED06, 07	03193500	GL-9PR6 (Red)	
LED08	03193600	GL-2PG1 (Green)	

C.R Carbon Resistor	E.L Low Ltak Electrolytic Capacito
S.R Solid Resistor	E.B Bi-Polar Electrolytic Capacitor
Ca.R Cement Resistor	E.BL Low Leak Bi-Polar Electrolytic
M.R Metal Film Resistor	Capacitor
F.R Fusing Resistor	Ta.C Tantalum Capacitor
N.J.R Non-Inflammable Resistor	F.C Film Capacitor
C.C Ceremic Capacitor	M.P Metalized Paper Capacitor
C.T Ceramic Capacitor, Temperature	P.C Polystyrene Capacitor
Compensation	G.C Gimmic Capacitor
E.C Electrolytic Capacinor	

#### 3-4. F-3010 Pre Scaler Circuit Board

(Stock No. 75989101 = T-80)

Choke Coil 3.5µH Inductor 100µH



Parts Lis	τ		_
Parts No.	Stock No.	Description	_
Transistor			
TR01,02	03063401, 2	29C1674 L, K	
+1C			
IC 01	03811300	AN6821	
	(03611200	SN74LS90N	
IC 02	{03613500	SN7490A	
	03613700	TD3490BP	
●Diode			
D 01 ~ 03	03111600	1S2473D	
L 01.02	42900101	Choke Coil 3.5µH	



• The circuit boards, F-3131 & F-3133 are not supplied as the assem- • Block Diagram of LA-1231 & μPC1161C bled, the individual parts on the circuit boards, however are provided for orders.

#### 3-5. F-3131 Power Switch Circuit Board

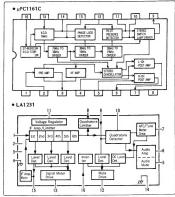


Parts List					
Parts No.	Stock No.	Description			
S 01	11323100	Push Switch, power 25V, 1A X Push Switch, power			

#### 3-6. F-3133 Stereo Indicator Circuit Board



Parts Li	st	
Parts No.	Stock No.	Description
LED01	03193200	GL-9PR9 (Red), Stereo AM
LED02	03193300	GL-9NG9 (Green), FMY
LED03	03193300	GL-9NG9 (Green), Quartz Locked X GL-9PR9 (Red), Stereo



# 4. REPLACEMENT OF DIAL CORD

- . If a dial cord is cut off or slips, replace it by following procedures. As this unit uses 0.5 mm o cord, please replace it with the same type certainly.
- The length of dial cord is approximately 215 cm (84.6 inch).

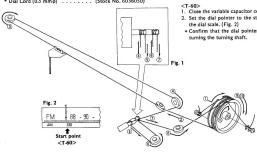
#### 4-1. Threading of Dial Cord

#### <T-80/60>

- Thread the dial cord in numerical order from 1 to 1 as Fig. 1.
- · Close the variable capacitor completely.
- \* Dial Cord (0.5 mm d) . . . . . . . (Stock No. 6036050)

#### 4-2. Attachment of Dial Pointer

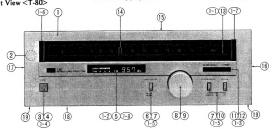
- 1. After installing the dial string, turn on the power switch. If the dial digital display is in the "FM Reception" state, turn the tuning knob until the digital display indicates 98.0 MHz. Then, fix the pointer to the dial string, after setting the pointer to the 98.0 MHz value of the scale.
- 2. After attaching Dial pointer confirm Dial pointer moves from 88 MHz to 108 MHz to turn the tuning knob.
- 1. Close the variable capacitor completely,
- 2. Set the dial pointer to the start point, the line at the left end of the dial scale. (Fig. 2)
- \* Confirm that the dial pointer runs smoothly on the dial scale by



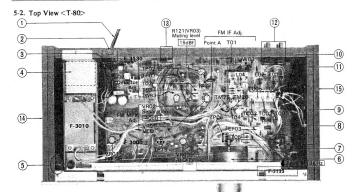
# T-80/60 T-80/60



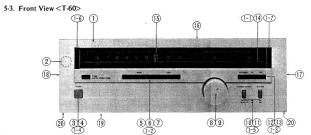
5-1. Front View < T-80>



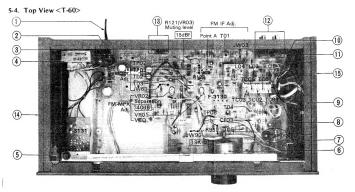
Parts Li	st							
Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
	770085410	Front Panel Ass'v (S)	1-8	54265600	Blue Filter, display window		(70367100	Tuning Unit (S)
1	70086010	Front Panel Ass'v (B)	2	04007800	Lamp, 20V, 0.12A	9	70367000	Tuning Unit (B)
1-1	52967900	Dial Window Glass	3	11323100	Push Switch, 25V 1A, power	10	11321500	Push Switch, FM mode & selector
1.2	54465400	Smoked Glass, display window		53195000	Push Knob (S), power	11	03193200	LED (Red), FM stereo
1-3	54465300	Smoked Glass, indicator window	4	53196500	Push Knob (B), power	12	03193300	LED (Green), quartz locked
	(69560600	Knob Guide (S), power	5	00000100	Fluorescent Display Tube	13	54088000	Dial Scale
1-4	59560900	Knob Guide (B), power	6	11314901	Push Switch, noise canceler	14	71161200	Dial Pointer Ass'y
	M9567810	Knob Guide (S).		153194910	Push Knob (S),	15	57272600	Bonnet
1-5		noise canceler, FM mode, selector	7	ł	noise canceler, FM mode, selector	16	54578110	Side Panel (R)
1-6	69867710	Knob Guide (B).		53194810	Push Knob (B),	17	54578000	Side Panel (L)
		noise canceler. FM mode selector		1	noise canceler, FM mode, selector	18	50864300	Bottom Board
1-6	54583100	Side Frame (L)		(53195200	Tuning Knob (S)	39	55075410	Hubber Patch
1.7	64689300	Side Frame (B)		53195300	Tuning Koob (D)			



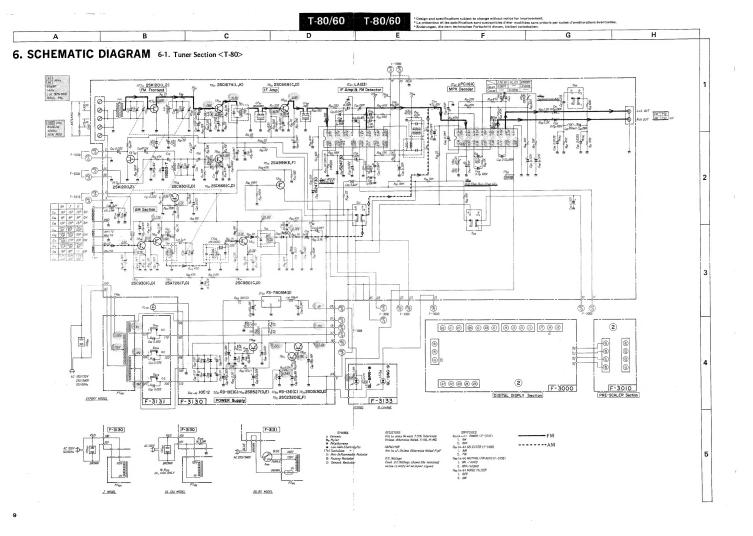
Parts Li	st								
Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	
1	38005400	Power Cord 125V, 10A	7	71361700	Tension Unit	14	54578000	Side Panel (L)	
2	39106000	Strain Relief	8	12203000	Variable Capacitor	15	54578110	Side Panel (R)	
3	24501100	AC Outlet	9	42010300	AM Bar Antenna				
4	40032200	Power Transformer	10	52968600	Antenna Holder				
5	04007800	Lamp 20V. 0.12A	11	61467220	Pulley				
	(70367100	Tuning Unit (S)	12	22902600	4P Antenna Terminal				



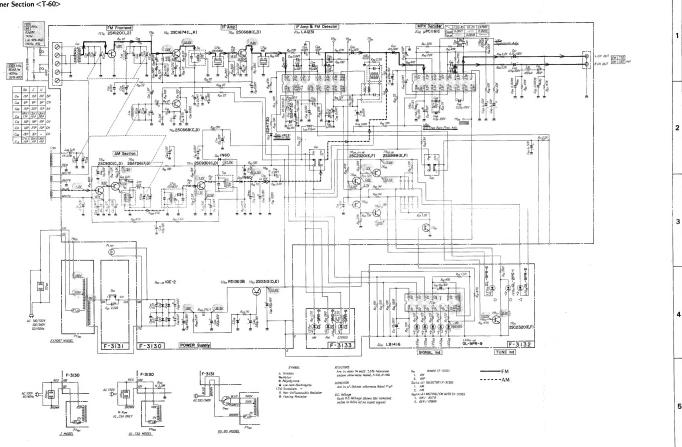
arts Lis	t					_		
erts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description
	(70085100	Front Panel Ass'v (S)	1-7	54583200	Side Frame (R)	10	11321500	Push Switch, FM mode & selector
1	78005600	Front Panel Ass'v (B)	2	04007800	Lamp, 20V, 0.12A	11	53194910	Push Knob (S), FM mode, selector
1-1	52967900	Dial Window Glass	3	11323000	Push Switch, 25V 1A, power		53194810	Push Knob (B), FM mode, selector
1.2	54465000	Smoked Glass, display window		(53195000	Push Knob (S), power	12	03193200	LED (Red), FM
1-3	54465300	Smoked Glass, indicator window	4	53198500	Push Knob (B), power	13	03193300	LED (Green), AM, FM stereo
	(59580800	Knob Guide (S), power	5	03193200	LED (Red), SIGNAL Indicator	14	54089000	Dial Scale
1-4	59580900	Knob Guide (B), power	6	03193500	LED (Red), TUNE Indicator	15	71161200	Dial Pointer Ass'y
	59567810	Knob Guide (S).	7	03193600	LED (Green), TUNE Indicator	16	57272600	Bonnet
1-5	1	noise canceler. FM mode selector		(53195200	Tuning Knob (S)	17	54578110	Side Panel (R)
	59567710	Knob Guide (B).	8	53195300	Tuning Knob (B)	18	54578000	Side Panel (L)
		noise canceler. FM mode selector	9	70367100	Tuning Unit (S)	19	50664300	Bottom Board
1.66	54683100	Side Frame (L)	9	70367000	Tuning Unit (B)	20	55075410	Rubber Patch



arts Lis	t								
arts No.	Stock No.	Description	Parts No.	Stock No.	Description	Parts No.	Stock No.	Description	
1	38005400 1	Power Cord 125V, 10A	7	71361700	Tension Unit	14	54578000	Side Panel (L)	
2	39106000	Strain Relief	8	12203000	Varisble Capacitor	15	54578110	Side Panel (R)	
3	24501100	AC Outlet	9	42010300	AM Ber Antenna				
4	40032300	Power Transformer	10	52968600	Antenna Holder				
5	04007800	Lamp 20V. 0.12A	11	61467220	Pulley				
	170367100	Tuning Unit (S)	12	22902600	4P Antenna Terminal				
6	70367000	Tuning Unit (B)	13	22007000	2P Input Terminal				

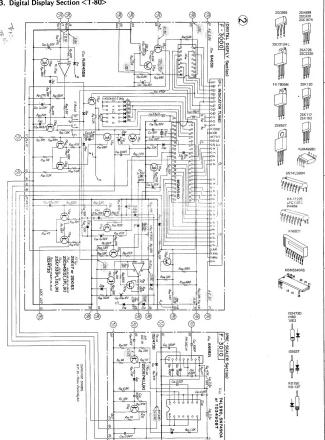


### 6-2. Tuner Section <T-60>





# 6-3. Digital Display Section <T-80>



# 7. PACKING LIST

Parts No.	Stock No.	Description
1	91263800	Vinyl Cover
2	90284000	Styrofoam Packing
3	90561800	Carton Case <t-80 (s)=""></t-80>
	90563000	Carton Case <t-80 (b)=""></t-80>
	90562000	Carton Case <t-60 (s)=""></t-60>
	90562600	Carton Case <t-60 (b)=""></t-60>



# 8. ACCESSORY PARTS LIST

Stock No.	Description
92055200	Operating Instructions <t-80></t-80>
92055100	Operating Instructions <t-60></t-60>
38201200	FM Antenna
38103200.1	PJP Cord



SANSULAUDIO EUROPE N.V.

SNASUI AUDIO EUROPE S.A.: Arabella center, 6 Frankfurt AM Main, Lyoner Strasse 44.48, West Germany
SANSUI ELECTRIC COMPANY LTD.: 141, Izumi 2-chome, Suginamiku, Tokyo 168 Japan PHONE: [03] 323-1111/TELEX: 232-2976